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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/603,622	06/26/2000	Eiichiro Kawakami	32011-164584	3193

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EXAMINER

SHAW, JOSEPH D

ART UNIT	PAPER NUMBER
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2141

DATE MAILED: 11/25/2003

7

Please find below and/or attached an Office communication concerning this application or proceeding.

PRG

Office Action Summary

Application No.

09/603,622

Applicant(s)

KAWAKAMI ET AL.

Examiner

Joseph D Shaw

Art Unit

2141

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) ____ is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☒ Claim(s) 4 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 June 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____ 6) ☐ Other: .

DETAILED ACTION

Claim Objections

1. Claim 4 is objected to because of the following informalities: The word "wee" on line 2 is assumed to be "were." Appropriate correction is required.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-8 and 10-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gonno (6,404,739) in view of Homma et al. (5,572,678).

- a. As per claim 1, Gonno teaches a main station (transmitter; col. 5, line 66); one or more substations connected to said main station by a common transmission line (the receivers may be placed in one network; col. 1, lines 56-57; col. 6, lines 1-6; Figs. 9A, 9B) a data transmitter which transmits data addressed to all of said one or more substations (cols. 5-6, lines 66-67, 1-2); a data receiver which receives said data, provided in said one or more substations (col. 6, lines 1-2); and a response transmitter which transmits a carrier as a response message (NAK), only when said data could not be received normally, provided on said one or more substations (col. 6, lines 21-24). However, Gonno

does not explicitly teach a message transmitter which transmits a message addressed to all of said one or more substations after said data are transmitted, to inquire whether reception was normal, provided in said main station. Homma teaches a system for sending data from a sender to a receiver(s) where the sender sends an inquiry to the receiver(s) about reception status after the transmission of the information frame (data)(Fig. 7; col. 8, lines 7-12). It would have been obvious to one of ordinary skill in the art at the time the invention was made to include inquiring about the reception status of data as taught by Homma in the method of Gonno because such protocol would provide for a broadcast or multicast communications service of high reliability as taught by Homma (col. 1, lines 52-67).

b. As per claim 2, Gonno discloses the claimed invention modified by Homma as described above and furthermore teaches the main station receiving said carrier within a prescribed period of time (there is a predetermined waiting time and the transmitter receives and totals retransmission requests; col. 9, lines 25-28).

c. As per claim 3, Gonno discloses the claimed invention modified by Homma as described above and furthermore teaches the prescribed period of time being the period until the time to start the next transmission of the data (transmitting more data when the period of time for waiting for retransmission requests is up; Fig. 5).

d. As per claims 4 and 5, Gonno discloses the claimed invention modified by Homma as described above and furthermore teaches the main station determining that all of said one or more substations were able to receive said data normally, when said main station does not receive said carrier within a prescribed period of time; and the main station effecting the next data transmission when said carrier is not received within a prescribed period of time (Fig. 5; col. 11, lines 31-40).

e. As per claims 6 and 7, Gonno discloses the claimed invention modified by Homma as described above and furthermore teaches the main station determining that any of said one or more substations were unable to receive said data normally, when said main station receives said carrier within a prescribed period of time; and the main station re-transmitting said data when the carrier is received within a prescribed period of time (Fig. 5; col. 11, lines 41-57).

f. As per claim 8, Gonno discloses the claimed invention modified by Homma as described above and furthermore teaches the main station terminating the transmission of said data and effecting the transmission of next data when said carrier is received after the same data have been transmitted a prescribed number of times (limiting the number of retransmissions; col. 10, lines 25-32).

g. As per claims 10 and 11, Gonno discloses the claimed invention modified by Homma as described above and furthermore teaches the one or more substations, when said normally received data are received one more, scraping these data; and the one or more substations, when said data that could not be normally received are received once more, taking up these data (the receivers

determine if they have already received the packets and if so, delete the packets, otherwise store them; Fig. 7; col. 13, lines 10-35).

4. Claim 9 rejected under 35 U.S.C. 103(a) as being unpatentable over Gonno (6,404,739) in view of Homma et al. (5,572,678) as applied to claims 1-8 and 10-13 above, and further in view of Gagne et al. (5,473,608).

h. As per claim 9, Gonno discloses the claimed invention modified by Homma as described above. However, the Gonno/Homma system does not explicitly teach the main station changing said prescribed number of times. Gagne teaches a method of communications in a distributed network that includes a user-defined timeout (col. 18, lines 5-6) and other customizable communication primitives (col. 2, lines 61-67, col. 3, lines 1-3). It would have been obvious to one of ordinary skill in the art at the time the invention was made to include customizable communication primitives (the main station changing said prescribed number of times) as taught by Gagne in the system of Gonno/Homma because customizable communication primitives allow for specific, customized communications based on the users needs as taught by Gagne (col. 2, line 67, col. 3, lines 1-3).

Response to Arguments

5. Applicant's arguments filed October 30th, 2003 have been fully considered but they are not persuasive.

i. Gonno discloses a transmitter for transmitting data to one or more receivers over a common transmission line (Fig. 1, col. 3, lines 35-39). Gonno employs a multicast network with multicast transmission, allowing each of the one or more receivers to receive the same data and same output signal. Gonno utilizes NAK's as response messages when requesting a resend from the main station. This NAK is inherently the claimed carrier. In data communications any signal sent is a carrier modulated to work for that particular data communication system. In addition, Gonno has no need to determine which receiver sent the retransmission request because data is retransmitted to all of the one or more receivers, leaving it up to the receivers to decide what to do with the retransmitted data (col. 13, lines 6-21).

j. In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., collision avoidance; several substations transmitting a response message at the same time on the same transmission line) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

k. In response to applicant's argument that the Homma system does not teach an appropriate communication method for retransmission requests from the receiver to the sender the Examiner would like to point out that Homma was used to teach sending out a message inquiring if data was received normally by

the receivers. Gonno sufficiently teaches the claimed communication method for retransmission requests from the receiver to the sender on the same transmission line (col. 6, lines 21-24; col. 8, lines 17-24).

l. In response to applicant's argument that Gonno and Homma are nonanalogous art, it has been held that a prior art reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the applicant was concerned, in order to be relied upon as a basis for rejection of the claimed invention. See *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992). In this case, Gonno does indeed teach a receiver/transmitter architecture. In the Homma invention, the Point-to-Point architecture requires a receiver/transmitter architecture in order for data to be communicated. Therefore the data communication taught by Homma is analogous to the data communication system in Gonno.

m. In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

n. In response to applicant's argument that the Gagne reference does not explicitly teach the use of retransmission limits, the Examiner would like to point out that the Gagne use of timeouts allow for retransmission as many times as desired before the timeout expires (col. 18, lines 5-15). Thus, the timeout counter places a limit on the number of retransmissions that can occur and is capable of performing the same use.

Conclusion

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

o. A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

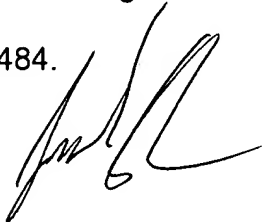
7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph D. Shaw whose telephone number is 703-305-

Art Unit: 2141

0094. The examiner can normally be reached on Monday - Thursday, 6:30 AM - 4:00 PM, and on alternate Fridays.

8. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rupal Dharia can be reached on 703-305-4003. The fax phone numbers for the organization where this application or proceeding is assigned are 703-305-3718 for regular communications and 703-305-3718 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-306-5484.



Joseph Shaw
Examiner
Art Unit 2141
November 20, 2003



RUPAL DHARIA
SUPERVISOR